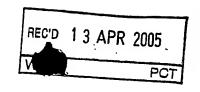
PATENT COOPERATION TREATY PCT



INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference							
PCT03089	FOR FURTHER ACTION		See Form PCT/IPEA/416				
International application No.	International filing date	(day/month/year)	Priority date (day/month/year)				
PCT/CN03/00095 28 Jan. 200		28/01/2003) 27 Feb. 2002 (27/12/2002)					
International Patent Classification (IPC) or	national classification and	IPC					
IPC7 C07D493/04,C07D493/22,A61K31/34							
Applicant SHANGHAI INSTITUTE O	f Materia Medica, C	HINESE ACADEMY	Y OF SCIENSES et. al.				
This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.							
2. This REPORT consists of a total of	3	sheets, including	this cover sheet.				
3. This report is also accompanied by A	NNEXES, comprising:		1				
a. (sent to the applicant and to the International Bureau) a total of sheets, as follows: sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).							
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.							
Supplemental Box Relating	ting and/or tables related to Sequence Listing (see	I thereto, in compu Section 802 of the Ac	ter readable form only, as indicated in the				
4. This report contains indications rela	ting to the following items	5:					
⊠ Box No. I Basis of the report							
Box No. II Priority							
Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability							
☐ Box No. IV Lack of unity							
⊠ Box No. V Reasoned state	ement under Article 35(2)	with regard to novelt	y, inventive step or industrial applicability;				
citations and explanations supporting such statement							
Box No. VI Certain docum	Box No. VI Certain documents cited						
Box No. VII Certain defects in the international application							
Box No. VIII Certain observations on the international application							
Date of submission of the demand		Date of completion	of this report				
9 Jun. 2004(09.06.2004)			20 Mar. 2005(20.03.2005)				
Name and mailing address of the IPEA/		Authorized officer	(E) 2011				
6 Xitucheng Rd., Jimen Bridge, Haidian District, 100088 Beijing, China			Liu shūjūg X				
Facsimile No. 86-10-62019451		Telephone No. 86	5-10-620855711171				
Form PCT/IPEA/409 (cover sheet) (Janua	ry 2004)						

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/CN=3/00095

Box No. I	Basis of the report		
	gard to the language, this report is based on the internation se indicated under this item.	nal application in the language in	n which it was filed, unless
	is report is based on translations from the original languag hich is the language of a translation furnished for the purpo	•	,
	international search (under Rules 12.3 and 23.1(b))		
	publication of the international application (under Rule	: 12.4)	
	international preliminary examination (under Rules 55.	2 and/or 55.3)	
to the r annexe	egard to the elements of the international application, this receiving Office in response to an invitation under Article and to this report):		
	ne international application as originally filed/furnished ne description:		
	pages		as originally filed/furnished
_		received by this Authority on	
1		received by this Authority on	
	e claims:		
_	pages		as originally filed/furnished
	pages *		th any statement)under Article 19
	pages *	received by this Authority on	
	pages *	received by this Authority on	
☐ th	e drawings:		
	pages		as originally filed/furnished
		received by this Authority on	
	pages •	received by this Authority on	
a	sequence listing and/or any related table(s) - see Suppleme	ental Box Relating to Sequence l	Listing.
3. 🔲 Т	The amendments have resulted in the cancellation of:		•
	the description, pages		
	the claims, Nos.		
	the drawings, sheets/figs		
	the sequence listing (specify):		
	any table(s) related to sequence listing (specify):		
	This report has been established as if (some of) the amendm ince they have been considered to go beyond the disclosur		
	the description, pages		
	the claims, Nos.		
	the drawings, sheets/figs		
	any table(s) related to sequence listing (specify):		
* If ite	em 4 applies, some or all of those sheets may be marked "s	superseded."	

INTERNATIONAL PRELIMINARY REPO

N PATENTABILITY

International application No. PCT/CN02/00095

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial apility; citations and explanations supporting such statement						
	pportug					
1. Statement:	Claims	1-8	YES			
Novelty (N)			ИО			
Inventive step (IS)	Claims	1-8	YES			
	Claims		NO			
Industrial applicability (IA)	Claims	1-8	YES			
	Claims		NO			
Citations and explanations (Rule 70.7) The cited documents: CN1246121A (PHARMAGI	ENESIS	INC), 1 Mar. 2002(01/03/2002), the whole docu	ument			
D2: CN1261602A (CHENGDU	DIAO PH	HARM CO CHINESE ACAD SCI) 2 Aug 2000 (02/	08/2000)			
the whole document						
D3: CN1257507A (HOECHST	MARIO	N ROUSSEL INC.) 21 Jun 2000 (21/06/2000) t	he whole			
document						
than H on 5- and/or 6- po triptolide disclosed in the positions. Therefore the s requirements of Article 33(3	osition of prior art ubject m 2) PCT.	otolide derivatives of formula (I), which have a gr f the parent structure of triptolide. But the structu (documents 1-3), didn't have substitutes on the natter of claims 1 – 8 appears to be novel and	5- and 6- meet the			
 2.3 Inventive step The compounds of the present invention have different structure to the prior arts documents. The object of the present invention is to provide new triptolide derivatives that have high anti- inflammatory and immunology inhibition activities with lower toxicity. On account of the unexpected effects of the present compounds over the triptolide derivatives with H group on both 5-and 6- position have been given in the present invention and this modification of structures and improvement of effects is not obvious to a person skilled in the arts, the claims 1-8 fulfil the requirement of Article 33(3) PCT. 2.4 Industrial applicability The compounds of the present invention can be made or used in the industry, therefore the subject matter can be considered industrial applicable and claims 1-8 fulfil the requirement of 						
Article 33(3) PCT.						